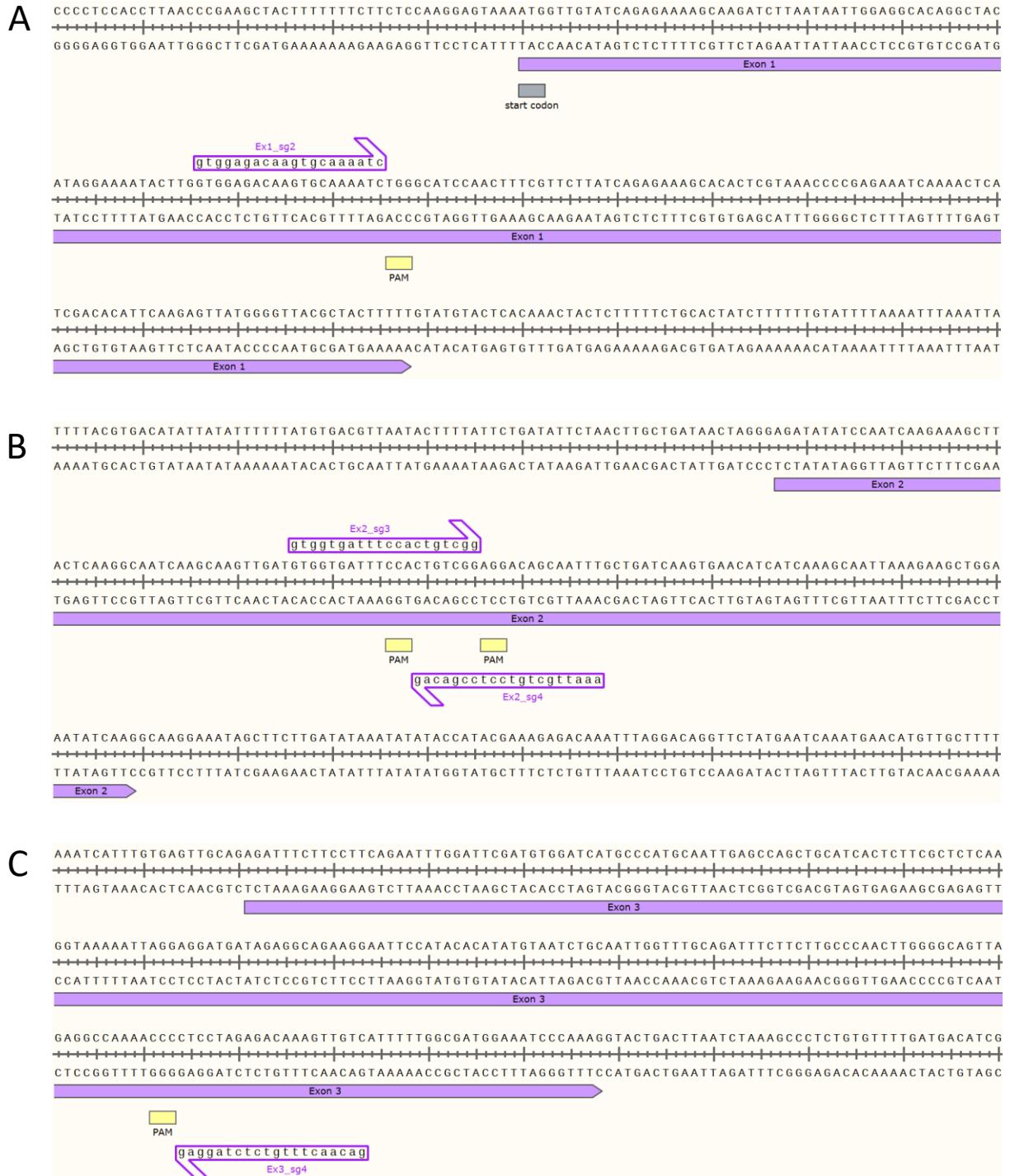


Supplemental Fig 1 A622 exon sequences targeted for induced mutation via CRISPR-Cas sgRNAs. Sequences of exons 1, 2, and 3 are indicated in windows A, B, and C, respectively. PAM sites are indicated by yellow rectangles.



Supplemental Fig 2 *A622L* exon sequences targeted for induced mutation via CRISPR-Cas sgRNAs. Sequences of exons 1, 2, and 3 are indicated in windows A, B, and C, respectively. PAM sites are indicated by yellow rectangles.

Supplemental Table 1 Primer sequences used to amplify *A622* and *A622L* exon sequences targeted for induced mutation.

Primer	Primer Sequence (5'-3')
A622_F	GGTAATGACACAGCTAGAC
A622_F1	GTAATTCCCGAGGAAGGATT
A622_F2	CATACATCGACAATAGAAG
A622_F3	GTAAAATTACCACACAAACG
A622_R	CTTCTATTGTCGATGTATG
A622_R1	CTCGTTGTGTGGTAATTTAC
A622_R2	GCCTCACTATTAGAGTCT
A622_R3	GAGGTGGTTGTTATATAT
A622_R4	TATGTTACCTTGTACAATC
A622_R5	GTCCCTCTGTGAAAGATGG
A622L_F	GCAAATTAAAGTACTATAATCGTG
A622L_F1	TTTGCATGTAGGGGATC
A622L_F2	CAGAGAAAGCACACTCGT
A622L_F3	TATCAAGGCAAGGAAATAG
A622L_F4	TACCATACGAAAGAGACA
A622L_R	CCTAGTTATCAGCAAGTTAG
A622L_R1	CTCTGCAACTCACAAATG
A622L_R2	GTCCCTCTGTGAAACAAGTT
A622L_R3	GAGGTGCTTGTATGTTACC
A622L_R4	GTGGATCATCTACTGCTTTC

Supplemental Table 2 Primer combinations and PCR annealing temperatures used to amplify and sequence CRISPR-Cas target sequences.

Gene	sgRNA	Primer Pair	Annealing	Sequencing
			Temperature (°C)	Primer
A622	Ex1_sg2	A622_F1/R1	52	A622_F1
A622	Ex2_sg3	A622_F2/R1	48	A622_F2
		A622_F/R1	52	A622_F
		A622_F1/R1	55	A622_F1
A622	Ex2_sg4	A622_F/R1	52	A622_R1
A622	Ex3_sg4	A622_F3/R5	53/54	A622_F3
		A622_F3/R2	50	A622_F3
A622L	Ex1_sg2	A622L_F1/R	52	A622L_F1
A622L	Ex2_sg3	A622L_F/R1	54	A622L_F
		A622L_F1/R1	54	A622L_F1
		A622L_F2/R1	54	A622L_F2
A622L	Ex2_sg4	A622L_F2/R1	54	A622L_R1
A622L	Ex3_sg4	A622L_F3/R3	53	A622L_F3
		A622L_F3/R4	53	A622L_F3

Supplemental Table 3 PCR primers used to amplify and detect transgene components in gene-edited plants.

Transgene Component	Tm (°C) (F/R)	Forward Sequence (5'-3')	Reverse Sequence (5'-3')
Cas9	67.4/66.4	TGACGATAAGATGGCCCCAA	TTCTTCTTGATGCTGTGCCG
CaMV 35S Promoter	61.4/63.6	GCTCCTACAAATGCCATCA	GATAGTGGGATTGTGCGTCA
Hpt II Selectable Marker	63.6/65.5	ACTCCCCAATGTCAAGCACT	GGCGAAGAACCTCGTGCTTT